Session 1: Diagnosis of Stable Ischemia and CHD

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INTRODUCTION:

The *traditional view* of the chronic stable ischemia syndrome and coronary heart disease (CHD) is that of patients with stenoses in large atherosclerotic epicardial coronary vessels that limit blood flow during periods of increased myocardial oxygen requirement. The symptomatic picture that has become the hallmark of this syndrome is that of a distressed man clutching his fist to his chest in the mid-sternal region. While relatively "fixed" atheromatous stenoses are central to the pathophysiology of this syndrome, dynamic changes in coronary size also contribute but probably to a lesser extent. These dynamic changes in coronary size (e.g., vasomotion) are believed to contribute to the variability in ischemia provocation. Indeed, when patients are selected using this prevailing picture of symptoms and anatomic findings, studies over the prior 30 years have yielded an overwhelming predominance of men (e.g., RCTs of CABG vs. medical therapy: evaluation of angina symptoms with the Seattle angina questionnaire, etc.) which is discordant with the almost equivalent frequencies of death due to CHD known to occur in men and women.

Recent evidence suggests a somewhat different view of women with a chronic stable ischemia syndrome. This *contemporary view* is that women have high frequencies of symptoms atypical for classical angina pectoris and dynamic changes in coronary vessel size often not associated with flow limiting large vessel stenoses. Indeed, findings from the WISE have indicated that women with symptoms who are referred for coronary angiography often have atypical symptom profiles. While only a minority has flow-limiting lesions on angiography, the majority have findings indicative of dynamic changes in coronary size (e.g., coronary vascular dysfunction). In the absence of large vessel obstruction, these latter findings involving dysfunctional endothelium and/or small vessels have the potential to limit blood flow and cause cardiac ischemia.

Data presented in this section will elaborate upon these findings related to symptom recognition and coronary structure and function.

QUESTIONS TO BE ADDRESSED IN THIS SECTION ARE:

Are women with CHD more likely than men to have *symptoms atypical for angina pectoris*?

If so, what are their characteristics ("female pattern angina")?

Could *coronary vascular dysfunction* account for ischemia and these symptoms in the absence of large vessel obstruction in women?

If so, what are its characteristics and causes?